

REMARKS

In response to the Official Action mailed November 21, 2002, Applicants request continuing examination. An amendment follows. In the amendment, claim 10 is clarified, no claims are cancelled, and claim 12 is added, so that claims 10-12 are now pending.

An amendment is made to the specification at page 3 of the patent application to remove inadvertent errors and to conform to what is illustrated in Figures 1 and 2 of the patent application.

Claim 10 encompasses the structure described in the patent application as a first embodiment of the invention. Claim 10 has been corrected so that it more accurately describes the stator structure. The stator includes a stator core 3. The stator core includes a plurality of protruding poles, elements 3a in the embodiment of Figure 1, and a plurality of armature coils, elements 3b in the embodiment of Figure 1. Each armature coil is wound around a corresponding protruding pole. The motor of claim 1, at least with reference to the embodiment of Figure 1, has a shaft 4 that is fixed and does not rotate because it is clamped by the shaft holder 1a.

Claim 11 is amended so that it conforms to amended claim 10.

Newly added claim 12 encompasses the embodiment of Figure 4. The motor illustrated in the embodiment of Figure 4, described as the third embodiment of the patent application, has a shaft 4 that rotates. Unlike the embodiment of Figure 1, the motor embodiment of Figure 4 has a rotor case 6 that rotates. The bearing 55 rotatably supports the shaft 4 and is, itself, fixedly mounted to the support 1b.

In the Official Action mailed November 21, 2002, claim 10 was rejected as anticipated by Takeda et al. (U.S. Patent 6,104,114, hereinafter Takeda). In addition, claim 11 was rejected as unpatentable over Takeda in view of Saneshige et al. (U.S. Patent 5,747,908, hereinafter Saneshige). Thus, it is apparent that if Takeda does not anticipate claim 10 that the rejection of claim 11 also fails.

To anticipate claim 10, it is fundamental that Takeda must disclose every element of that claim. Takeda fails on numerous grounds. Perhaps the most salient difference between the motor as defined by claim 10 and the motor described by Takeda is the absence in the claimed motor of rotation of the shaft. As described in claim 10, the shaft is fixedly mounted to the stator base. The stator base, by definition, is stationary. The final paragraph of claim 10 recites that the rotor case is rotatably supported by a bearing that is between the supports and the shaft.

In Takada, the rotor case 18, by definition, rotates. The shaft 22 rotates with the rotor case 18 because one end of the shaft is fixed to the turntable 20 and the shaft is rotatably supported by the supporting wall 13 through the bearings 14. See Takeda at column 3, lines 42-45.

The motor defined by claim 10 is also different from Takeda because Takeda includes no holes in the flexible circuit board much less holes having the arrangement of the penultimate paragraph of claim 10. As is apparent from the patent application, by providing the holes in the flexible circuit board, the element 20 in the embodiment of Figure 1, the armature coils can extend into the holes. As a result, the entire motor can have a smaller height than a motor in which there is no such openings.

The flexible circuit board of Takeda, element 44, has no openings whatsoever. That board is continuous opposite the coil 36 as shown in Figure 2 of Takeda. Takeda not only lacks an element of the invention as defined by claim 10, but cannot achieve the advantage associated with that element. In comparing the motor of Takeda to claim 10, the Examiner asserted that the elements 27 of Takeda correspond to the supports of claim 10. There can be no such correspondence because the supports of the claimed motor are bent *from* the stator base. It is apparent that the element 27 in Takeda is part of the rotor, not part of the stator or a stator base. Moreover, that element 27 is described as being an annular depending portion. See Takeda at column 3, line 46. An annular structure does not have a plurality of supports as does the motor of claim 10. Rather, there is a single continuous wall in an annular element, such as the depending element 27 of Takeda. Because of this further difference between the invention claimed and Takeda, there can be no anticipation of claim 10.

The flexible circuit board in Takeda is the lowermost element of the motor as depicted in Takeda's Figures 1 and 2. However, the flexible circuit board of the invention is disposed between the stator base and the stator, a position entirely different from the location of the flexible circuit board of Takeda. This difference also prevents anticipation of claim 10 by Takeda.

In other words, upon close comparison of the motor as defined by claim 10, even before the foregoing amendment, and Takeda, it is apparent that there can be no anticipation. With the exception of the rotor case, the stator coil, and the plurality of armature coils, there is no potential identity between the elements of claim 10 and what is disclosed by Takeda. The rejection was erroneous and cannot be properly maintained now.

With regard to claim 11, it is sufficient to point out that Saneshige, like Takeda, lacks a stationary shaft. Thus, even disregarding other differences between Saneshige and Takeda,

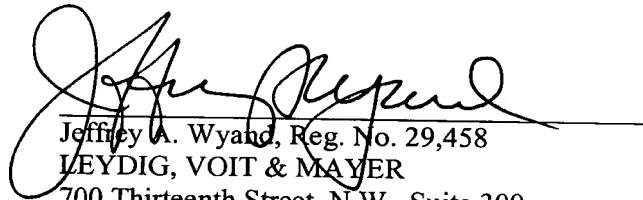
In re Appln. of YAMAGUCHI et al.
Application No. 09/587,340

no combination of Takeda and Saneshige can include all of the elements of the motor defined by claim 10.

New claim 12, as already described, is directed to a motor in which the shaft rotates with the rotor case, unlike the motor of claim 10. Although the rotating shaft of the motor of claim 12 rotates just as the shaft 22 of Takeda rotates, it is apparent that the other features of claim 12 already distinguishing claim 10 from Takeda, also prevent anticipation of claim 12 by Takeda. In fact, claim 12 is clearly patentable over Takeda,

Prompt allowance of claims 10-12 is earnestly solicited.

Respectfully submitted,


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